



04/08/13

## Technical Report for

**Anderson, Mulholland & Associates**

**BMSMC, Building 5 Area, PR**

**SM04.00.06 Area E 1 CM**

**Accutest Job Number: JB30082R**

**Sampling Dates: 02/27/13 - 02/28/13**

### Report to:

**Anderson, Mulholland & Associates**

**ttaylor@amaiconsult.com**

**ATTN: Terry Taylor**

**Total number of pages in report: 13**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

A handwritten signature in black ink that reads 'Nancy F. Cole'.

**Nancy Cole**  
**Laboratory Director**

**Client Service contact: Tammy McCloskey 732-329-0200**

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), PA, RI, SC, TN, VA, WV

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.  
Test results relate only to samples analyzed.

# Table of Contents

-1-

**Section 1: Sample Summary ..... 3**

**Section 2: Case Narrative/Conformance Summary ..... 4**

**Section 3: Summary of Hits ..... 5**

**Section 4: Sample Results ..... 6**

**4.1:** JB30082-1R: AREAEC\_9BOT ..... 7

**4.2:** JB30082-2R: AREAEC\_12BOT ..... 8

**4.3:** JB30082-3R: AREAEC\_13BOT ..... 9

**Section 5: Misc. Forms ..... 10**

**5.1:** Chain of Custody ..... 11

## Sample Summary

Anderson, Mulholland & Associates

Job No: JB30082R

BMSMC, Building 5 Area, PR

Project No: SM04.00.06 Area E 1 CM

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JB30082-1R	02/27/13	17:30 TT	03/01/13	SO	Soil	AREAEC_9BOT
JB30082-2DR	02/28/13	10:15 TT	03/01/13	SO	Soil Dup/MSD	AREAEC_12BMSD
JB30082-2R	02/28/13	10:15 TT	03/01/13	SO	Soil	AREAEC_12BOT
JB30082-2SR	02/28/13	10:15 TT	03/01/13	SO	Soil Matrix Spike	AREAEC_12BMS
JB30082-3R	02/28/13	11:55 TT	03/01/13	SO	Soil	AREAEC_13BOT

---

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

## CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** Anderson, Mulholland & Associates

**Job No** JB30082R

**Site:** BMSMC, Building 5 Area, PR

**Report Date** 4/1/2013 5:16:27 PM

On 03/01/2013, 3 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 4 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB30082R was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

### Volatiles by GC By Method SW846-8015C (DAI)

**Matrix:** SO

**Batch ID:** GGH4267

- All method blanks for this batch meet method specific criteria.
- Sample(s) JB30082-2RMS, JB30082-2RMSD were used as the QC samples indicated.
- JB30082-3R: Sample analyzed outside the holding time per client's request.
- JB30082-2RMSD: Sample analyzed outside the holding time per client's request.
- JB30082-2RMS: Sample analyzed outside the holding time per client's request.
- JB30082-2R: Sample analyzed outside the holding time per client's request.
- JB30082-1R: Sample analyzed outside the holding time per client's request.
- JB30082-3R for Methanol: More than 40 % RPD for detected concentrations between the two GC columns.
- JB30082-1R for Methanol: More than 40 % RPD for detected concentrations between the two GC columns.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

## Summary of Hits

Page 1 of 1

Job Number: JB30082R  
Account: Anderson, Mulholland & Associates  
Project: BMSMC, Building 5 Area, PR  
Collected: 02/27/13 thru 02/28/13

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
---------------	------------------	--------------------	----	-----	-------	--------

JB30082-1R AREAEC\_9BOT

Methanol <sup>a</sup>	560	230	55	ug/kg	SW846-8015C (DAI)
-----------------------	-----	-----	----	-------	-------------------

JB30082-2R AREAEC\_12BOT

No hits reported in this sample.

JB30082-3R AREAEC\_13BOT

Methanol <sup>a</sup>	1020	260	63	ug/kg	SW846-8015C (DAI)
-----------------------	------	-----	----	-------	-------------------

(a) Sample analyzed outside the holding time per client's request. More than 40 % RPD for detected concentrations between the two GC columns.

## Sample Results

---

## Report of Analysis

---

## Report of Analysis

Page 1 of 1

Client Sample ID:	AREAEC_9BOT	Date Sampled:	02/27/13
Lab Sample ID:	JB30082-1R	Date Received:	03/01/13
Matrix:	SO - Soil	Percent Solids:	86.6
Method:	SW846-8015C (DAI)		
Project:	BMSMC, Building 5 Area, PR		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	GH92241.D	1	03/20/13	XPL	n/a	n/a	GGH4267
Run #2							

Run #	Initial Weight
Run #1	5.0 g
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
67-63-0	Isopropyl Alcohol	ND	120	54	ug/kg	
67-56-1	Methanol <sup>b</sup>	560	230	55	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	93%		58-133%
111-27-3	Hexanol	98%		58-133%

(a) Sample analyzed outside the holding time per client's request.

(b) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 1 of 1

Client Sample ID:	AREAEC_12BOT	Date Sampled:	02/28/13
Lab Sample ID:	JB30082-2R	Date Received:	03/01/13
Matrix:	SO - Soil	Percent Solids:	86.5
Method:	SW846-8015C (DAI)		
Project:	BMSMC, Building 5 Area, PR		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	GH92242.D	1	03/20/13	XPL	n/a	n/a	GGH4267
Run #2							

Run #	Initial Weight
Run #1	5.3 g
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
67-63-0	Isopropyl Alcohol	ND	110	51	ug/kg	
67-56-1	Methanol	ND	220	52	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	93%		58-133%
111-27-3	Hexanol	70%		58-133%

(a) Sample analyzed outside the holding time per client's request.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



## Report of Analysis

Page 1 of 1

Client Sample ID:	AREAEC_13BOT	Date Sampled:	02/28/13
Lab Sample ID:	JB30082-3R	Date Received:	03/01/13
Matrix:	SO - Soil	Percent Solids:	75.8
Method:	SW846-8015C (DAI)		
Project:	BMSMC, Building 5 Area, PR		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	GH92243.D	1	03/20/13	XPL	n/a	n/a	GGH4267
Run #2							

Run #	Initial Weight
Run #1	5.0 g
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
67-63-0	Isopropyl Alcohol	ND	130	61	ug/kg	
67-56-1	Methanol <sup>b</sup>	1020	260	63	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	93%		58-133%
111-27-3	Hexanol	95%		58-133%

(a) Sample analyzed outside the holding time per client's request.

(b) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Misc. Forms

5

### Custody Documents and Other Forms

---

Includes the following where applicable:

- Chain of Custody

2235 Route 130, Dayton, NJ 08810  
TEL: 732-329-0200 FAX: 732-329-3499/3480  
www.accutest.com

FedEx Tracking # <b>7948559107699</b>	Bottle Order Control #
Accutest Order #	Accutest Job # <b>JB30082</b>

Client / Reporting Information	Project Information	Requested Analysis ( see TEST CODE sheet)	Matrix Codes
Company Name <b>AMAI</b> Street Address <b>110 Corporate Park Dr</b> City State Zip <b>White Plains, NY 10604</b> Project Contact <b>Terry Taylor ttaylor@amainc.com</b> Phone # <b>914-391-1225</b> Sample(s) Name(s)	Project Name <b>BMS Bldg S Area E 1CM</b> Street Billing Information ( if different from Report to) Company Name Street Address City State Zip Project # Client Purchase Order # Project Manager Attention:	Requested Analysis ( see TEST CODE sheet)	Matrix Codes DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank LAB USE ONLY H2 T6 14 I6 4944

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles	Requested Analysis	Matrix Codes
1	AREAEC-9 BOT		2/27/13	1730	SO	4			X	
2	AREAEC-12 BOT		2/28/13	1015	SO	4			X	
3	AREAEC-12 BMS		2/28/13	1015	SO	4			X	
4	AREAEC-12 BMS D		2/28/13	1015	SO	4			X	
5	AREAEC-13 BOT		2/28/13	1155	SO	4			X	

Turnaround Time ( Business days)	Approved By (Accutest PM): / Date:	Data Deliverable Information	Comments / Special Instructions
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input type="checkbox"/> other		<input type="checkbox"/> Commercial "A" ( Level 1) <input type="checkbox"/> Commercial "B" ( Level 2) <input checked="" type="checkbox"/> FULLT1 ( Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data	Use AREAEC-12 BMS and AREAEC-12 BMS D for MS/MS D samples * 3 ENCORES 1 9 ENCORES 03/1/13

Relinquished by:	Date Time:	Received By:	Date Time:	Relinquished by:	Date Time:	Received By:	Date Time:
1	2/28/13 1630	1	FEDUP	2	3/1/13 1000	2	
3		3		4		4	
5		5					

Sample Custody must be documented below each time samples change possession, including courier delivery.

Custody Seal # **110**

Intact ☒ Not intact ☐

Preserved where applicable ☐

On Ice ☐

Cooler Temp. **4.08**

JB30082R: Chain of Custody

Page 1 of 3

## Accutest Laboratories Sample Receipt Summary

**Accutest Job Number:** JB30082      **Client:** \_\_\_\_\_      **Project:** \_\_\_\_\_  
**Date / Time Received:** 3/1/2013      **Delivery Method:** \_\_\_\_\_      **Airbill #s:** \_\_\_\_\_  
**Cooler Temps (Initial/Adjusted):** #1: (4/4); 0#2: (4/4); 0

**Cooler Security**

Y or N	Y or N
1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/>	3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/>	4. Smpl Dates/Time OK <input checked="" type="checkbox"/> <input type="checkbox"/>

**Cooler Temperature**

Y or N
1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/>
2. Cooler temp verification: <u>IR Gun</u>
3. Cooler media: <u>Ice (Bag)</u>
4. No. Coolers: <u>2</u>

**Quality Control Preservation**

Y or N	N/A
1. Trip Blank present / cooler: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
2. Trip Blank listed on COC: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
3. Samples preserved properly: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
4. VOCs headspace free: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	

**Sample Integrity - Documentation**

Y or N
1. Sample labels present on bottles: <input checked="" type="checkbox"/> <input type="checkbox"/>
2. Container labeling complete: <input checked="" type="checkbox"/> <input type="checkbox"/>
3. Sample container label / COC agree: <input checked="" type="checkbox"/> <input type="checkbox"/>

**Sample Integrity - Condition**

Y or N
1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/>
2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/>
3. Condition of sample: <u>Intact</u>

**Sample Integrity - Instructions**

Y or N	N/A
1. Analysis requested is clear: <input checked="" type="checkbox"/> <input type="checkbox"/>	
2. Bottles received for unspecified tests: <input type="checkbox"/> <input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis: <input checked="" type="checkbox"/> <input type="checkbox"/>	
4. Compositing instructions clear: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	
5. Filtering instructions clear: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	

Comments

Job Change Order: JB30082\_3\_15\_2013

Requested Date:	3/15/2013	Received Date:	3/1/2013
Account Name:	Anderson, Mulholland &	Due Date:	3/15/2013
Project	BMSMC, Building 5 Area, PR	Deliverable:	FULT1
CSR:	michello	TAT (Days):	14

=====

Sample #: JB30082-All  
Dept:  
Dept:

Change:  
Please relog for D8015IPA & DGC+METH. OK to  
run out of hold time.

=====

Above Changes Per: Terry Taylor Date: 3/15/2013

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

Page 1 of 1